

DETAILED ACTION

Election/Restrictions

In view of applicants' remarks and the art found during the search process, the restriction requirement previously made has been withdrawn and all of the claims have been examined.

Claim Rejections - 35 USC § 112

Claims 2,3,10,16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What process steps are being claimed in claims 2 and 3? Claim 10 implies the oxidizing gas has been previously claimed but it has not; clarification is required. There is no proper antecedent basis for 'the precipitation step' in claim 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of either Arbiter et al, Kuhn et al, or Csendes. APA is the process discussed early in the specification which includes the treatment of a mineral laden slurry by various processing steps e. grinding, flotation separating, etc. In APA, the control of oxygen within the process has been a problem resulting in

undesirable end products. Each of the secondary references solves this problem by disclosing a similar process including the step of recirculating oxygen bearing gas to provide for strict oxygen control within the process. In order to provide for strict oxygen control within the process, it would have been obvious for one of ordinary skill in the art to modify APA by providing for steps including the recirculation of oxygen bearing gas, taught to be desirable by each of the secondary references. The remaining limitations would then have been well within the scope of one skilled in the art. For example, the particular step into which the oxygen bearing gas is recirculated would have been a design choice only once it was known to recirculate the gas as in the secondary references. Other steps not shown in the basic combination appear to be known in the art. For example, the particular gas used as a recirculating gas would have been well within the scope of one skilled in the art and of no patentable merit. Also, measuring potential of a slurry is well known in the art as are the particular ways of measuring it. Limitations such as these do not appear to present patentable subject matter; if this is incorrect, applicants should particularly point out what steps are not common knowledge in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Rosenbaum whose telephone number is 571-272-4523. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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